DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004665

Address: 333 Burma Road **Date Inspected:** 12-Nov-2008

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Geng Wei, Zhang Bao Wei **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG Assembly

Summary of Items Observed:

This report serves to document the events occurring on this date at the following location. Caltrans Quality Assurance (QA) Inspector Robert Vatcher arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

OBG Assembly Bay II

5AE- No Observed Welding Activity

5BE- No Observed Welding Activity

5CE- No Observed Welding Activity

3AE- QA observed heat straightening to HSR1 (B)-3528 rev. 0 which states a maximum deformation of 4 millimeters at deck panels DP056-001 to DP055-001. As well heat straightening has been performed on deck panels DP0063-001 & DP064-001. Heat straightening continues. No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time.

3BE- Surveying and dimensional verification being performed by ZPMC personnel at this time. QA spoke with AB F representative Wang Heng concerning the welding schedule and he mentioned that only heat straightening would be performed today. QA requested that METS be informed prior to any deck panel joining whether it is

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tacking or otherwise. No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time.

4AE- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

4BE- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

Mid bay-

QA observed the in process joining of deck panels DP324-002 to DP297-001 by the SAW process. QA measured welding parameters in accordance with welding procedure specification WPS-B-T-2221-B-L2C-S-2 utilizing non corroded or detritus bearing 4.0 mm diameter H14 electrode wire by qualified welding operator Wang Min 048296. Measured amperage at 600.0. Voltage at 33.0, travel speed at 430 mm per minute. QA performed a cursory visual examination of the back gouged root area prior to further depositing of weld metal. ZPMC QC personnel Wang Jie was present for this welding evolution.

5CW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

5BW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

5AW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

4BW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

4AW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

3BW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

3AW- No deck panel to deck panel or diaphragm plate to floor beam flange welding occurring as of this time. No Observed Welding Activity elsewhere as well.

North Bay of OBG Assembly- QA spoke with AB/F QC representative Li Hanjie in general concerning the width of vertical weld weave beads approaching the rejectable threshold per AWS D1.5 (2002). QA offered this as a gesture for future reference over the scale of the entire project. Mr. Hanjie concurred and QA began to leave as AB/F QC representative Peter Shaw approached. Mr. Shaw asked what the matter was and Mr. Hanjie explained.

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Mr. Shaw raised his voice unnecessarily and said "It's a fucking lifting lug, are we ever going to get this bridge done?!" QA mentioned that the bridge was getting done. Mr. Shaw replied with an unfavorable "Fuck You!"

Summary of Conversations:

No relevant conversations this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 138-1694-2685, who represents the Office of Structural Materials for your project.

Inspected By:	Vatcher,Robert	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer